ABSTRACT OF THE DISCLOSURE

A metric generation scheme for use in OFDM receivers. In a preferred embodiment, an OFDM receiver of the invention includes a dynamic quantizer to compress a series of channel-state information values. Also, a bit de-interleaver is provided to de-interleave a series of symbol-based data inverse to interleaving operations at a transmitter end. The de-interleaved symbol-based data is further compressed by another dynamic quantizer to yield a complex signal according to a constellation scheme. Then a metric generator calculates a bit metric of a zero group and a bit metric of a one group for each received bit in which the constellation is divided into the one group and the zero group for each bit location.